UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

#### NOTICE OF ALLOWANCE AND FEE(S) DUE

23416

7590

04/03/2009

CONNOLLY BOVE LODGE & HUTZ, LLP P O BOX 2207 WILMINGTON, DE 19899

EXAMINER				
SAEED, KAMAL A				
ART UNIT	PAPER NUMBER			

1626 DATE MAILED: 04/03/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,626	07/11/2006	Jens Scheidel	12810-00321-US	6527

TITLE OF INVENTION: ISOMERISATION OF CIS-2-PENTENENITRILE TO FORM 3-PENTENENITRILE IN A REACTIVE DISTILLATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/06/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

#### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correcte maintenance fee notificate	correspondence including ed below or directed other tions	ng the Patent, advance on nerwise in Block 1, by (a	ders and notification of a) specifying a new corre	maintenance fees v espondence address	vill be and/or	mailed to the current r (b) indicating a sepa	correspondence address as trate "FEE ADDRESS" for
		ock 1 for any change of address) /2009	Fee par	e(s) Transmittal. The pers. Each additionate re its own certificate	is certif I paper e of mai	icate cannot be used f , such as an assignme iling or transmission.	r domestic mailings of the or any other accompanying nt or formal drawing, must
CONNOLLY I P O BOX 2207 WILMINGTON	BOVE LODGE & , DE 19899	HUTZ, LLP	I h Sta adc tra:	Cer ereby certify that th tes Postal Service v fressed to the Mai asmitted to the USP	tificate is Fee( vith suf Stop TO (57	e of Mailing or Trans s) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the d	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
							(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	JAMED INVENTOR ATTORN		RNEY DOCKET NO.	CONFIRMATION NO.
10/585,626	07/11/2006		Jens Scheidel			2810-00321-US	6527
		CIS-2-PENTENENITRI					
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0 <b>¬</b>		\$1810	07/06/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
SAEED, K		1626	558-355000				
<ul> <li>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</li> <li>□ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</li> <li>□ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</li> </ul>		nge of Correspondence	(1) the names of up t or agents OR, alternat (2) the name of a sing registered attorney or 2 registered patent att	For printing on the patent front page, list  ) the names of up to 3 registered patent attorneys agents OR, alternatively,  b) the name of a single firm (having as a member a gistered attorney or agent) and the names of up to registered patent attorneys or agents. If no name is sted, no name will be printed.			
PLEASE NOTE: Unl recordation as set forti (A) NAME OF ASSIG	ess an assignee is ident h in 37 CFR 3.11. Comp GNEE		data will appear on the J T a substitute for filing ar (B) RESIDENCE: (CIT	patent. If an assign assignment. Y and STATE OR C	COUNT	TRY)	ocument has been filed for
Please check the appropri	iate assignee category or	categories (will not be pr	inted on the patent):	Individual LC	orporati	ion or other private gro	oup entity Government
	are submitted: To small entity discount p # of Copies	permitted)	<ul> <li>Payment of Fee(s): (Ple</li> <li>A check is enclosed.</li> <li>Payment by credit ca</li> <li>The Director is hereboverpayment, to Dep</li> </ul>	rd. Form PTO-2038 y authorized to char	is atta	nched. required fee(s), any de	
a. Applicant claim	<b>tus</b> (from status indicate s SMALL ENTITY statu	is. See 37 CFR 1.27.	☐ b. Applicant is no los				
NOTE: The Issue Fee and interest as shown by the i	d Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than Office.	the applicant; a regi	stered :	attorney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed name	e			Registration N	lo		
an application. Confident submitting the completed his form and/or suggesti	tiality is governed by 35 I application form to the ons for reducing this bu. Tirginia 22313-1450. DC	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the	1.14. This collection is es depending upon the indi e Chief Information Office	stimated to take 12 i vidual case. Any co eer. U.S. Patent and	minutes mment Traden	s to complete, including ts on the amount of tire mark Office, U.S. Dena	I by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,626	07/11/2006	Jens Scheidel	12810-00321-US	6527
23416 75	590 04/03/2009		EXAM	IINER
CONNOLLY BO	OVE LODGE & HUT	SAEED, K	AMAL A	
P O BOX 2207			ART UNIT	PAPER NUMBER
WILMINGTON, DE 19899				
WILMINGTON, I	DE 17077		1626	

### **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 570 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 570 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)
	10/585,626	SCHEIDEL ET AL.
Notice of Allowability	Examiner	Art Unit
	Kamal A. Saeed	1626
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate comr IGHTS. This application is and MPEP 1308.	in this application. If not included nunication will be mailed in due course. <b>THIS</b>
2. 🔀 The allowed claim(s) is/are 12-23 now reumbered as 1-12.		
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority ur</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority do</li> </ul>	been received. been received in Applicat	ion No
International Bureau (PCT Rule 17.2(a)).		-
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4.   A SUBSTITUTE OATH OR DECLARATION must be subm	IENT of this application.	
INFORMAL PATENT APPLICATION (PTO-152) which give		
5. CORRECTED DRAWINGS ( as "replacement sheets") mus		
(a) including changes required by the Notice of Draftspers	•	ew ( PTO-948) attached
1)  hereto or 2)  to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t		
<ol> <li>DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT</li> </ol>		
Attachment(s)	5 <b>-</b> - N - 11 - 12	
1. Notice of References Cited (PTO-892)		nformal Patent Application
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	Paper No	Summary (PTO-413), b./Mail Date
<ol> <li>Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>7/11/2006</u></li> </ol>	r. □ Examiner	s Amendment/Comment
<ol> <li>Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol>		s Statement of Reasons for Allowance
	9.	<u></u> ·

### **DETAILED ACTION**

Claims 1-11 have been cancelled. Therefore, claims 12-23 are currently pending in this application.

### <u>Information Disclosure Statement</u>

Applicant's Information Disclosure Statements, filed on July 11, 2006 has been considered. Please refer to Applicant's copies of the 1449 submitted herewith.

## Reasons for Allowance

The present invention is directed to a process of isomerizing pentenenitrile 3-pentenenitrile in the presence of at least one heterogeneous catalyst in a distillation column comprising a bottom zone, a reaction zone and a top zone. The closest prior art is U.S. Patent No. 3,526,654. The process claimed in this application differ from the process of the prior art in that isomerization is carried out by reactive distillation. In the prior art process isomerization is carried out in a reaction column followed by a second column in which distillation separation takes place. None of the published processes anticipated, or rendered obvious, the process as described in this application.

Therefore, claims 12-23 are allowable.

Any comments considered necessary by applicant must be submitted no later than the payment issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submitions should be clearly labeled "Comments on Statement for Reasons for Allowance."

# **Telephone Inquiry**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kamal A Saeed whose telephone number is (571) 272-0705. The examiner can normally be reached on M-T 7:00 AM- 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Joseph K. McKane, can be reached at (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Please note this is the central FAX number for all official correspondence.

Communication via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise requires a signature, may be used by applicant and should be addressed to [joseph.mckane@uspto.gov]. All Internet e-mail communications will be made of record in the application file. PTO employees will not communicate with applicant via Internet e-mail where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is of record an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the applicant. See the Interim Internet Usage Policy published by the Patent and Trademark Office Official Gazette on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or public PAIR only. For more

Application/Control Number: 10/585,626 Page 4

Art Unit: 1626

information about the pair system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

/Kamal A Saeed/

Primary Examiner, Art Unit 1626